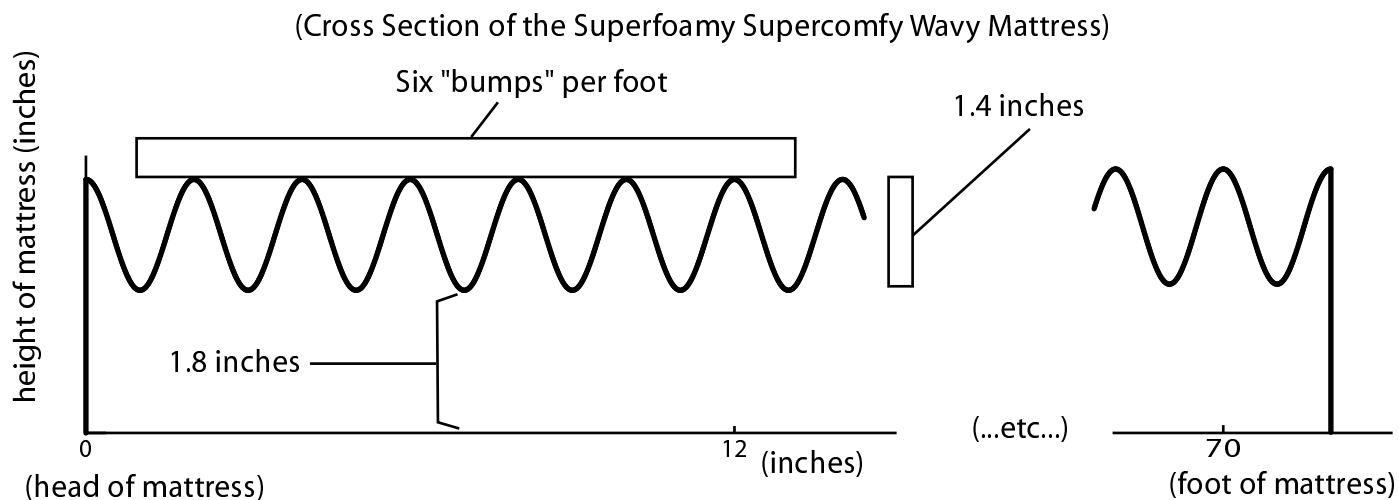


6. (13 pts) As part of your new job as Assistant Inventor at “All Things Foam” you have invented a product you call the “Superfoamy Supercomfy Wavy Mattress,” and you have delivered the following specifications to Asha, the factory manager:



“I’m sorry,” says Asha. “Regulations demand that all new product schematics be given also in formula form.”

a) Satisfy the factory regulations by writing a formula for the height H of the mattress, as a function of the horizontal distance d from the head of the mattress.

b) What are the domain and range of your function?